

mize the problems associated with beeper use without interfering with patient care.

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Head Injury and Video Games

TO THE EDITOR: The incidence of accident victims surviving severe head trauma is increasing due to recent advances in acute medical care. These patients commonly present with numerous medical complications requiring multiple medical procedures. The use of medications for seizure prophylaxis has become routine because of the possibility of seizure disorders.

The recreational use of video games is rapidly increasing. In addition, video games present an attractive potential for remedying the cognitive impairments that often limit the adjustment of closed head injury survivors.

Last year we saw a 32-year-old man injured in a motorcycle accident. He sustained severe closed head injuries and a T-6 fracture-dislocation and resultant incomplete paraplegia. During the acute phase, he had several complications including hydrocephalus, which required placement of a ventriculoperitoneal shunt. In addition, during three months of acute care, he was placed on a regimen of phenobarbital, 30 mg given four times a day, as a prophylactic measure against seizures, although no clinical seizures were noted.

The patient's progress in the rehabilitation unit appeared to be hampered by his diminished level of alertness. No clinical seizures were observed, and an electroencephalogram showed no epileptiform discharges, although no visually evoked electroencephalograms were obtained. Consequently the administration of phenobarbital was discontinued in an attempt to improve his participation in rehabilitation. This resulted in an apparent increased level of participation with the patient able to return home following three months of intensive rehabilitation.

Approximately a week following discharge, after playing a popular video game for two hours without interruption, he had a grand mal seizure and phenytoin (Dilantin) was given intravenously. Therapy with phenytoin continues and the patient has had no other seizures. Visually evoked electroencephalograms are pending.

The patient's history suggests that certain head-injured patients may be vulnerable to visually evoked seizures following prolonged use of video games. Cau-

tion in the recreational or therapeutic use of video games with this patient population may be indicated. Further inquiry is required.

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Why Three?

TO THE EDITOR: In a simple parlor game participants are asked to select a number from one to ten and write it on a piece of paper. About 50 percent of people select the number three. Why? Speculation is that it is a "safe" number, not the smallest and not the largest, and that it alone has perfect symmetry, a beginning, a middle and an end. Or perhaps there is something built into our culture and our consciousness that makes three a lucky and a special number.

The Kaballah, an ancient Hebrew religious book that is obsessed with numerology, cites many important groups of three—for example, three elements: water, air and fire; three important body parts: heart, stomach and head; three great attributes: "crown," wisdom and intelligence; three characteristics of man: substance, thought and life. In the Kaballah, except for the number one (one deity), no number is more important than three, and perhaps seven. And in Christianity there is of course the power and importance of the Holy Trinity.

Medicine, too, has its "holy trinities." In hospital orders the number three occurs with great frequency and sometimes with little rationale. Blood cultures are often ordered times three. Why three? Washington¹ in his chapter on the diagnosis of endocarditis in the *Todd-Sanford-Davidsohn* laboratory manual, states that "two sets of blood cultures are sufficient." The text also states that for the diagnosis of other bacteremias "collection of more than three sets of cultures [in 24 hours] should be performed only following consultation with the laboratory director." Tests of stool specimens for occult blood are commonly ordered times three. Moreover, the test kits used for outpatients are designed to be done on three successive days.

In a patient suspected of having myocardial infarction, electrocardiogram (ECG) and enzyme studies are often routinely ordered times three. Why? The creatine kinase MB band will be positive within the first day and is more specific than the serum aspartate aminotransferase (formerly SGOT) and the lactic dehydrogenase. While the ECG findings may not be abnormal in the first few hours after an infarction, they certainly will be by the second day. If it is necessary to observe the evolutionary changes, then more than three days are needed. Many hospitals require intermittent positive-pressure breathing orders and orders for antibiotic administration to be renewed every 72 hours—three days. Why three? Sputum cultures for tubercle bacilli are ordered three times. On what basis? I often hear my colleagues say that patients cluster in threes, that is, death often comes in threes, cancer-diagnosed patients come in threes, and so forth. Three is also a favorite

prognostic number, that is, "Take this medicine for three days and call back"; or, "Wait three days and then we'll consider a different approach."

The medical fascination with three may be built out of solid clinical experience or scientific reason. But like all traditions and "routines" it deserves reexamination to be certain that we are being cost effective and efficient. It may turn out that there is a certain amount of magic in our medical three that is as mystical as the Kaballah.

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Interaction Between Valproic Acid and Phenytoin

TO THE EDITOR: I enjoyed reading the succinct and educational "Epitomes of Progress, Neurology—Important Advances in Clinical Medicine" in the October issue. Nevertheless, in her effort to be brief, Dr Doris Trauner¹ may have left room for a potentially hazardous interpretation. She states, "Valproic acid . . . decreases phenytoin concentrations, so that blood concentrations of [this medication] should be monitored closely when used in combination with [valproic acid]." From this it would not be unreasonable for the reader to make a common assumption that if the serum concentration of the interacted drug falls below the usual "therapeutic" range, the dose should be increased. It is true that the effect of the common interaction, wherein the metabolism of drug A is stimulated by drug B, can be overcome by increasing the dose of A. This remedy *cannot* be used for the phenytoin/valproic acid interaction. While total serum phenytoin may decrease with the addition of valproic acid, the fraction of remaining phenytoin not bound to plasma protein increases. The actual concentration of this free phenytoin may unpredictably decrease,² remain constant³ or increase⁴ from pre-valproic acid levels. The paradox of this interaction has been well documented⁵ and there are recommendations that phenytoin dosage not be altered on the basis of this anticipated interaction alone.^{3,6} Unfortunately, monitoring total serum phenytoin concentrations as a measure of therapeutic success or impending toxicity will prove unreliable, not helpful and even misleading.

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Covert Diuretic Use and Anorexia Nervosa

TO THE EDITOR: In the October 1982 issue there appeared an article by Drs Spratt and Pont entitled "The Clinical Features of Covert Diuretic Use."¹ In this article the authors described the cases of two patients with covert diuretic abuse. Both of these patients, on the basis of the information provided in the article, should carry the psychiatric diagnosis anorexia nervosa. Most psychiatrists would immediately suspect that a person who took diuretics or laxatives (or both) covertly has an eating disorder. Indeed some of the other information provided in the article pointed strongly in that direction.

The baffling thing about the presentation to me is that these patients could be treated for "covert diuretic use" without addressing the real problem. Although it was a fine article and I am sure Bartter's syndrome is an entity I should know about, I am more sure that anorexia nervosa is something that the authors should know about.

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Non-Hodgkin's Lymphoma in Homosexual Men

TO THE EDITOR: As has been recently reported, the male homosexual population is at increased risk for certain tumors.¹ Recently, Ziegler and co-workers² observed another malignancy that may have an increased incidence in homosexual men. They reported four cases of a Burkitt's-like lymphoma in male homosexuals, thus adding another malignancy that may be associated with a male homosexual life-style. In the past year we have also observed two such cases of lymphoma in homosexual men:

PATIENT 1. A 29-year-old homosexual man was evaluated for increasing abdominal girth in January 1980. On physical examination an abdominal mass was found. At laparotomy, a biopsy specimen showed a Burkitt's-like lymphoma. The patient was treated with combination chemotherapy (cyclophosphamide-doxorubicin-vincristine-prednisone, or CHOP). Following an initial response complicated by the tumor lysis syndrome, the patient had progressive disease resistant to further therapy and died in March 1980.

PATIENT 2. A 27-year-old homosexual man was admitted to hospital for evaluation of an abdominal mass.